

4412F ebmpapst 12V 0.44A 119x119x25mm DC Axial Fan

SKU: 4412F

Price: \$69.23

Categories: Fans

Tags: ebmpapst

Product Link:

<https://www.electspares.com/product/4412f-ebmpapst-12v-0-44a-119x119x25mm-dc-axial-fan/>

Product Description

The ebmpapst 4412F is a high-performance 12VDC DC Axial Fan with dimensions of 119 x 119 x 25 mm, featuring a robust glass-fiber reinforced PBT plastic housing specifically engineered for mission-critical cooling in Industrial Frequency Converters and high-density electronic enclosures. Driven by a brushless DC motor with maintenance-free ball bearings and a Sinusoidal commutation system, this 0.175 kg unit operates on a 8.0 - 12.6 VDC supply delivering a Max. Power Consumption of 5.3 W and a Max. Current Draw of 0.44A at a rated speed of 2900 RPM. This High-performance unit achieves a Max. Air Flow of 100.1 CFM (170.0 m³/h / 2.83 m³/min) and a Max. Static Pressure of 6.12 mmH₂O (60.0 Pa / 0.24 inAq). Featuring integrated electronic protection against reverse polarity and blocked rotor with an auto-restart function, this 7-blade unit is designed for a direct 2-wire connection and is optimized for industrial VFD systems requiring reliable DC airflow and global safety compliance, boasting an L10 life expectancy of 60,000 hours at 40 °C at the end.

4412F Fan Parameters

Model Number: 4412F

Ident Number: 9293505444 / VWC0119FUGAS

Manufacturer: ebmpapst

Type: DC Axial Fan

Impeller Size: 119 mm

Dimensions: 119 x 119 x 25 mm

Weight: 0.175 kg

Bearing Type: Ball bearing

Nominal Voltage: 12 VDC

Nominal Voltage Range: 8.0 - 12.6 VDC

Max. Current Draw: 0.44A
Max. Power Consumption: 5.3 W
Power Consumption Tolerance: $\pm 15\%$
Rated Speed: 2900 RPM
Speed Tolerance: $\pm 10\%$
Max. Air Flow: 100.1 CFM (170.0 m³/h / 1.70 m³/min)
Max. Static Pressure: 6.12 mmH₂O (60.0 Pa / 0.24 inAq)
Working Air Flow: 170.0 m³/h
Static Pressure Increase: 60.0 Pa
Number of Blades: 7
Electrical Hookup: 2-wire leads (Red: +12V, Blue: GND), AWG 24, TR 64
Lead Wire Length: 310 mm (+- 10 mm), stripped and tin-plated
Motor Protection: Protection against reverse polarity and blocked rotor
Locked-rotor Protection: Locked-rotor and overload protection (Auto-restart)
Dielectric Strength: 500 VAC / 1 Min. (between housing and lead wires)
Sound Pressure Level: 43.0 dB(A)
Sound Power Level: 5.3 bel(A)
Degree of Protection: IP20
Insulation Class: Class E
Housing Material: Glass-fiber reinforced PBT plastic
Impeller Material: Glass-fiber reinforced PA plastic
Direction of Rotation: Counterclockwise (viewed toward rotor)
Airflow Direction: Exhaust over struts
Installation Position: Any
Ambient Temperature (Max.): 60 °C
Min. Operating Temperature: -20 °C
Life Expectancy L10: 60,000 h (at 40 °C) / 37,500 h (at 60 °C)
Standard Compliance: VDE; CSA; UL 507; CE; EAC

Application

The ebmpapst 4412F axial fan is the primary cooling component for industrial frequency converters and high-density electronic modules requiring high-velocity 12V DC airflow and robust multi-certification safety standards.

Product Images







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